ABSTRACT

The present invention is directed to a filter cleaning device, in particular, diesel particulate filters. In one embodiment, the device comprises a source of high pressure fluid and means to transport the fluid to a nozzle or nozzles; an actuator for moving the nozzles; a controller with logic for instructing the actuator to automatically move the nozzle or nozzles across the surface of the filter; a collection device and suction device downstream of the filter; and ducting to transport the fluid between parts of the system. In one embodiment, a second collection device is used downstream of the suction device to provide additional particulate removal. There are three methods proposed for providing high pressure cleaning fluid to the filter face: 1) rotating the filter and rotating the jet about an axis outside of the filter; 2) moving a nozzle in two perpendicular directions (*i.e.*, x-y); and 3) rotating a rectangular nozzle about the central axis of the filter.

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